



United States Senator  
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REPORTS TO ALABAMA



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## THE GROWING NEED FOR A NATIONAL MISSILE DEFENSE SYSTEM

Whenever tensions escalate in the on-again-off-again hostilities between the United States and Saddam Hussein, a Patriot battery is deployed to the Persian Gulf to protect our military personnel from a potential Scud missile attack. The recent 70-hours of air strikes during Operation Desert Fox were no exception. Despite the obvious urgency to defend American troops from ballistic missile attacks, the Pentagon is simultaneously considering proposals to radically restructure, if not terminate, some of the missile defense systems that are being developed to improve upon or replace systems like Patriot.

Critics of theater missile defense systems are emboldened by the Pentagon's struggles to fund all of its missile defense programs and by delayed or failing flight tests programs. Some critics even question whether we can develop an effective "hit-to-kill" technology, whereby a missile intercepts and destroys a hostile missile launched at our troops. According to this line of reasoning, only six of the twenty "hit-to-kill" intercept attempts have destroyed their intended target. It is short-sighted to lump all failures into the same category because missile test failures occur for many reasons and at various stages of flight. Of the seven flight tests that entered the "end game" phase, where the missile maneuvers to collide into the threat missile, six intercepted their target. This is a successful record, and with additional flight tests, we should be able to fix the problems that have caused the random failures to occur before the intercept "end game."

Americans have grown increasingly accustomed to expedience. We eat fast food; we access information instantaneously via the Internet; and the world is delivered to our living rooms in real-time on CNN. Unfortunately, our penchant for instant gratification is beginning to creep into an arena where it is neither prudent nor desirable, namely highly complex, technical R&D programs. A case in point is the Theater High Altitude Area Defense (THAAD) missile defense system. After suffering from a string of flight test set-

backs, some Pentagon officials and media pundits have called for its termination. More often than not, though, success springs from having the discipline to analyze failure and the patience to search for solutions. When the Army was developing the Sprint missile in the late 1960's, it failed on eight consecutive flight tests. Instead of terminating the missile, however, the Army expanded its development test program, fielding a missile that was able to consistently intercept Intercontinental Ballistic Missile (ICBMs) targets. As we endeavor to deploy more complex, sophisticated missile defense systems, we must be prepared to accept a certain level of developmental failures. Furthermore, when we encounter setbacks, we must take a rational approach to meet the challenges.

The threat of a ballistic missile attack is real, and the need for theater missile defense systems has never been greater. In the past year, Iran tested the Shahab-3, a medium range ballistic missile, and North Korea launched the Taepo Dong-1, a two-stage missile which is a major technical breakthrough for extending range. Ballistic missiles are quickly proliferating to our nation's enemies as these missiles have become a symbol of military might, national prestige, and stature for developing nations. Our enemies appreciate the political clout that comes with the ability to target American soldiers deployed abroad. Therefore, they are determined to develop or acquire ballistic missiles.

One of the most irresponsible proposals under consideration by the senior Pentagon management is to terminate development of the THAAD system and replace it with the Navy Theater Wide missile defense system. While the last few THAAD flight tests have been disappointing, THAAD is still the most mature missile defense system that is under development. With the exception of the interceptor itself, all of THAAD's major components, including a world class radar, are working very well. The technical community supports the conclusion that the development bugs that have plagued

THAAD's interceptor can be fixed through rigorous ground and flight testing. The Navy Theater Wide system is, for the most part, still theoretical paper engineering, and it will take several years to reach THAAD's present level of development. It is also too early to know if the Navy's interceptor will be any more successful, especially considering that it is based on older technology.

Furthermore, the Navy Theater Wide system can not defend against the same targets as THAAD. The Navy's system simply can not reach inland areas that are to be defended by THAAD, even if the Navy was willing to move its ships up to the shoreline where they are vulnerable to hostile fire. Perhaps more importantly, the minimum intercept altitude of Navy Theater Wide is so high that many of the ballistic missiles that THAAD can engage fall below the Navy's umbrella of coverage. Shorter and medium range ballistic missiles are a particular threat to ground forces, accounting for as much as 50 percent of all theater ballistic missile targets. Because these types of threats fly within the atmosphere, the Navy Theater Wide system will not be able to defend against them. If we cancel THAAD, the only system that is capable of engaging these missiles is Patriot.

Now is not the time to give up on our missile defense systems or to be making significant changes in the management or schedule of the programs. THAAD and Navy Theater Wide should be viewed as complementary systems, not competitors. The Navy system takes advantage of the mobility afforded by our naval supremacy over the world's oceans and is especially important during the early stages of a conflict when land-based systems, like THAAD, may not be available. Choosing one over the other unnecessarily will risk exposing our troops to a ballistic missile attack. For the same reason, the United States should move forward and deploy a national missile defense that can protect the Fifty States from a missile attack. The seriousness of the threat demands that we do nothing less than press on with the development of the most promising systems.